mixing in MATH

# How Many in a Minute

## Goal: Keep track of how much you can do in a minute

**Grades:** Pre-K–6+

**Minimum number of participants:** 1

**Suggested grouping:** individual

**Time:** 10 minutes or less

**Math:** estimating time (a minute); counting by 2's, 5's, and other numbers

**Materials:**

clock or watch that shows minutes and seconds

paper and pencil (optional)

**Prerequisites:** none

**Books about minutes:**

*A Second Is a Hiccup: A Child's Book of Time.* Hutchins, H. J. (Arthur A. Levine, 2007).

*Ten Minutes till Bedtime.* Rathmann, Peggy. (Putnam, 1998).

### Before beginning

Pick something everyone will do for a minute, such as jumping jacks or drawing stars.

### 1 Predict

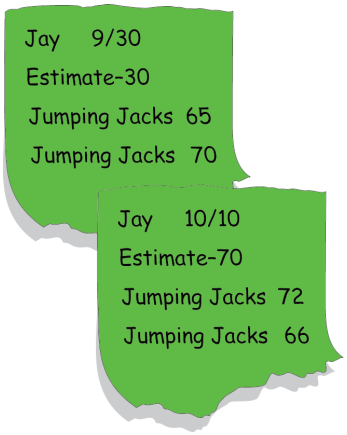
*How many stars do you think you can draw in a minute? Why do you think so?*

Talk About...

Record predictions (optional).

### 2 Keep track

Time for one minute while everyone does the activity and keeps count.




### 3 How many?

Compare predictions with results.

### 4 Repeat

Children compare their times on different trials. Choose a different child to be the timekeeper each time.

## Variations

**Draw, then count (easier).** Children draw as many circles or stars as they can in am minute. Then, they count them. They don't have to draw and count at the same time.

**Estimate a minute (same as main activity).** Explain the procedure, and then try it:

*Everyone shut your eyes. I'll say "Start!" when I'm going to start timing. Raise your hand when you think one minute is up.*

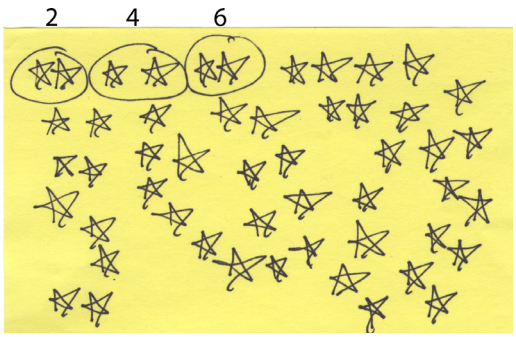
Note whose hands go up before one minute, whose at one minute, and whose after one minute. Once all hands are up, tell them the results.

**Time yourself (harder).** Children pair up. One times a minute while the other does the activity and keeps count. Then, they switch roles.

## Strategies for counting

*How Many in a Minute* gives children a reason to count efficiently and accurately. Ask children to do the activity, share and reflect on counting strategies, and try it again.

This example is drawn from a program in which a group of 5–8 year old children drew as many stars as they could in a minute.




### Share counting strategies

After children drew as many stars as they could, they were asked:

*How did you draw your stars?*

Child 1: I just did it fast.
Child 2: I did lines (across).
Child 3: All over the page.
Child 4: Two rows.


*What did you do when you counted? How did you count?*

Child 1: I wrote the numbers as I counted.
Child 2: I counted across by 1's
Child 3: Up and down.
Child 4: By 2's.
Child 5: By 10's.

### Reflect on counting strategies

*Was it easy for you to count? Why or why not?*

Some children who counted each star reported that they lost count and had to start over. The child who numbered each star was able to keep track, but her method was time-consuming. A child who made rows of 10 simply counted by 10's.

### Try it again

The second time they did the activity, many of the children organized the stars in rows or groups as they drew. They were able to count more quickly and easily to find their totals.

Organizing counts in groups works for physical activity, too. Some people count jumping jacks according to a rhythm or in a pattern such as "20, 1, 2, 3, 4, 5, 6, 7, 8, 9, 30, 1, 2, 3,…")